



U.S. Department of Energy
Energy Efficiency and Renewable Energy

Cross-cutting Analysis

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Hydrogen, Fuel Cells and Infrastructure

Technologies Program

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Cross-cutting Analysis

- Program benefits (oil, carbon, security)
- Managerial decision making
- Integrated view of hydrogen and end use technologies



- Technology characterizations
 - Stationary fuel cells
 - Fuel cell vehicle attributes
 - Hydrogen production/delivery
- Coordination of models
- Hydrogen and fuel cell markets

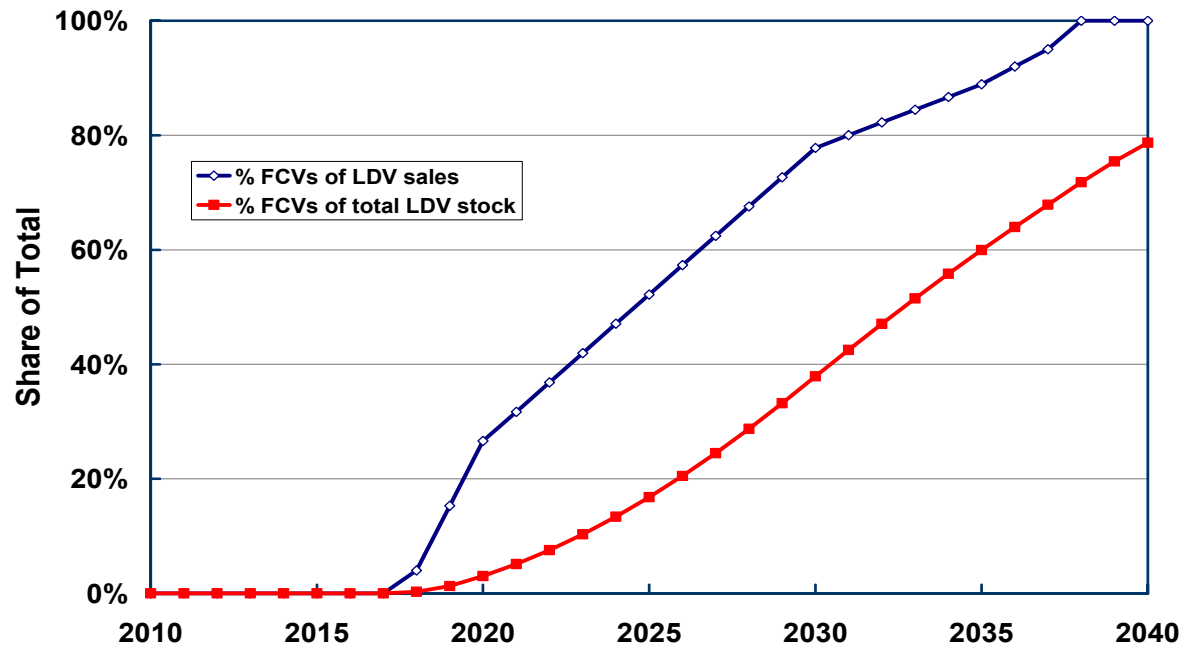


Projects

- Stationary fuel cell analysis
- Feedstock and delivery analysis
- H₂A
- Benefits analysis



Light-duty Fuel Cell Vehicle Market Penetration Scenario



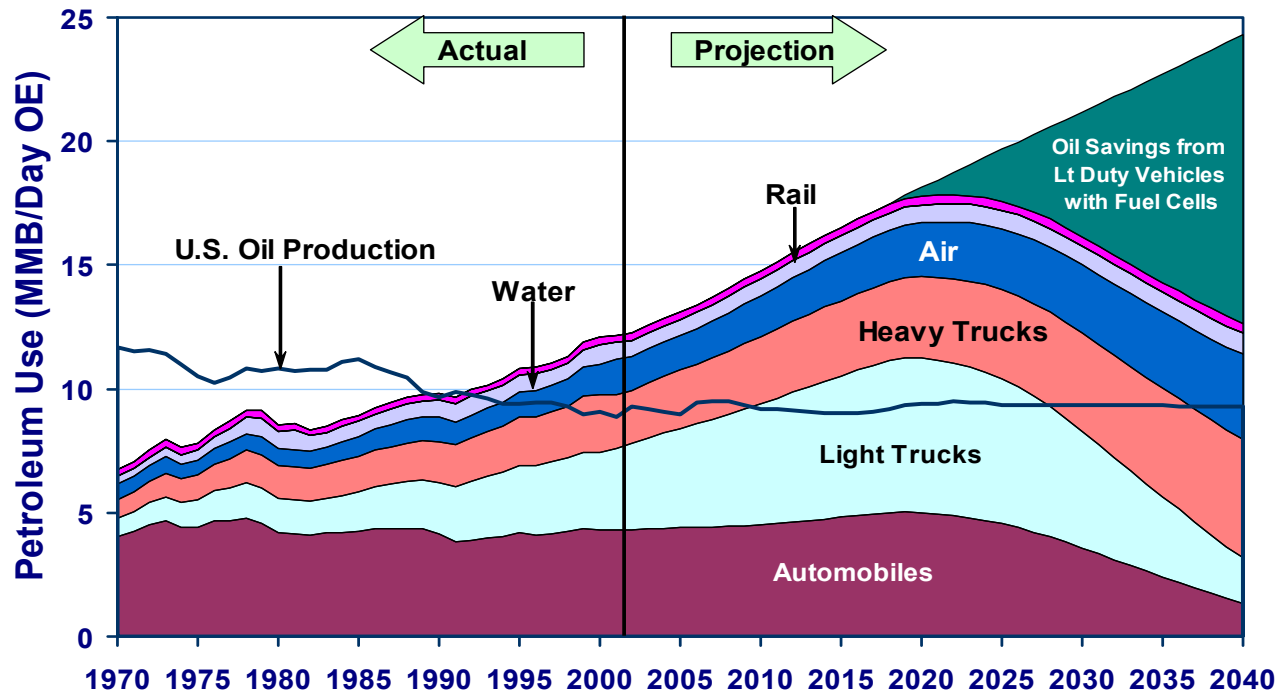
2015 Commercialization decision

2018 Aggressive market penetration begins



Vision Results

Oil Reduction Benefits of Hydrogen and Light-duty vehicles



Model suggests reduction in U.S. demand for oil by over 11 million barrels per day by 2040



Future Direction

- Synthesize analysis data into integrated planning model
- Standardize assumptions and improve technology characterizations
- Develop program benefits analysis that synchronize EIA, Markal, and program models